(704) 491-1545
davidjgoz@gmail.com

David Gómez

Relocating to NYC area
www.davidis.cool

Education

Massachusetts Institute of Technology
Bachelor of Science in Electrical Engineering, GPA 4.3/5.0

Cambridge, MA
June 2017

Experience

Fitbit - Electrical Engineer

San Francisco, CA
Aug. 2017 - Present

- Integrated touch screen on Charge 3: automated validation to characterize accuracy, used Python to analyze MFG data and set test limits to ensure quality, managed touch firmware vendor and CM to keep on schedule
- Led cross functional button/haptics R&D team to develop two new technologies into future smartwatch
- Executed BOM cost analysis identifying optimizations for multiple dollars of savings on future trackers
- Created and communicated data for haptics and sensor component selection decisions for smartwatch platform

MIT Formula SAE Electric – Low Voltage Systems Lead

Cambridge, MA
Sept. 2013- May 2017

- Managed team, architecture, and integration of sensor, vehicle control, and driver interfaces of electric racecar
- Designed and built multilayer PCBs enabling sensor communication over CAN, analog circuits for critical safety shutdowns, LED display of car state to driver via embedded microcontroller, and high and low voltage interfaces
- Architected first custom microcontroller implementations used to run all vehicle software
- Developed zigbee based RF telemetry system to stream CAN data to real time logging interface in Python

Fitbit - Battery Engineering Intern

San Francisco, CA
June - Aug. 2015

- Redesigned a tracker product to demonstrate fast charging with an alternative battery technology
- Analyzed large sets of in-market battery data with Python identifying user behavior and battery statistics
- Created analysis and automation software tools for battery lab testing in Python

Sonos - Sustaining Engineering Intern

Cambridge, MA
May - Aug. 2015

- Performed accelerated lifetime analysis of NAND memory usage in products to find potential wear-based risks
- Built software (Python/Perl) and hardware tools for automated data collection

Ford Silicon Valley Lab - Advanced Engineering Intern

Palo Alto, CA
May - August 2014

- Developed Ford Info Cycle, an open source sensor platform for crowdsourced data collection from bicycles
- Contributed to three invention disclosures leading to one patent (US9771124B2)

Skills

CAD Software
  Altium Designer, Eagle, Cadence Allegro, LTspice, Solidworks, Autodesk Fusion 360, Auto CAD, Creo
Fabrication
  TH and SMD soldering, 3D printing, laser cutting, waterjet, basic CNC machining, various hand tools
Programming
  Python, C/C++, Matlab, R, Verilog, Java, SQL, JavaScript, and HTML

Leadership

6.111 – Digital Electronics Laboratory Assistant

Cambridge, MA
Sept. - Dec 2016

  Explained topics and helped students in a digital design class focusing on FPGAs

Burton 3rd Undergraduate Dormitory Floor Chair

Cambridge, MA
Sept. 2015 – May 2016

  Managed events (including alumni weekend events with $10K budget) and other operations for dorm floor

Awards

Northern Telecom/BNR Project Award Best 6.111 Project: Autonomous FPGA controlled RC Car
FIRST Robotics Competition International Dean's List Winner

2016
2012